

# CLAIMS

1. A communication platform for providing computer/telephony integration services to remote subscribers, comprising:
  - 5 - a call switching unit for communicating with an external telephone network or interconnected networks through a communications trunk;
  - for each of one or more subscribers, a subscriber telephony component executed by processing means belonging to the communication platform and connectable to an external subscriber's information system through a private data channel, whereby
    - 10 said subscriber telephony component can communicate with other components of said subscriber's information system so as to be logically part of said information system, each subscriber telephony component being capable of controlling calls handled by said switching unit in response to data communication through the private channel.
- 15 2. A communication platform according to claim 1, wherein each subscriber telephony component is comprised of an intelligent agent.
3. A communication platform according to claim 1, wherein said private data
  - 20 channel is a virtual private network link (VPN) connected to a network of the subscriber's information system.
4. A communication platform according to claim 1, wherein said switching
  - 25 unit is capable of redirecting towards the telephone system of a given subscriber incoming calls intended for said subscriber through said communication trunk.
5. A communication platform according to claim 1, wherein said switching
  - unit is capable of redirecting towards the computer system of a given subscriber incoming calls intended for said subscriber through said private secure data channel.
- 30 6. A communication platform according to claim 1, further comprising:

- call handling resources available to each of said subscriber telephony components,  
- storage for resource allocation data in association with each subscriber telephony component, and  
- control means for allocating call handling resources to a given subscriber telephony component when handling a telephone call on the basis of said resource allocation data.

7. A communication platform according to claim 6, wherein said call handling resources comprise voice processing resources.

8. A communication platform according to claim 7, wherein said voice processing resources are connected to said switching unit.

9. A communication platform according to any one of claims 6 to 8, further comprising a billing system in communication with said control means for billing each subscriber according to call handling resource usage.

10. A communication platform according to claim 1, comprising at least one hosted switch hardware platform comprising:

- said processing means for executing at least one subscriber telephony component,  
- said hosted call switching unit, and  
- control means for controlling said switching unit according to instructions by said executed subscriber telephony components.

11. A method for providing computer telephony integration to a subscriber, comprising the following steps:  
- providing a hardware communication platform, said communication platform comprising a hosted call switching unit in communication with an external telephone network or interconnected networks through a communications trunk, and call handling resources,

- installing a subscriber telephony component for execution on said communication platform,
- providing a permanent private secure data channel between said subscriber telephony component in said communication platform and an external information system of said subscriber,
- for each incoming call intended for the subscriber, directing said call to said communication platform,
- allocating call handling resources of said communication platform to said subscriber telephony component for handling said incoming call.

12. A method according to claim 11, comprising, before the call handling resources allocation step, a step of checking from resource allocation data stored by the communication platform whether there are sufficient call handling resources available for the current incoming call.

13. A method according to claim 12, comprising periodically computing a bill to the subscriber according to call handling resource usage by the associated subscriber telephone component.

14. A method according to claim 11, further comprising, in association with said installation step, the additional step of allocating to the subscriber telephone component security data for secure communications with said subscriber information system.

15. A method according to claim 11, further comprising, in association with said installation step, the additional step of allocating to the subscriber telephone component security data for secure communications between said component and the rest of said communication platform.

16. A communication platform for providing computer/telephony integration services to remote subscribers, comprising:

- a call switching unit for communicating with an external telephone network or interconnected networks through a communications trunk;  
 - for each of one or more subscribers, an intelligent agent executed by processing means belonging to the communication platform and connectable to an external  
 5 subscriber's information system through a private data channel, whereby said intelligent agent can communicate with other components of said subscriber's information system so as to be logically part of said information system, each intelligent agent being capable of controlling calls handled by said switching unit in response to data communication through the private channel.

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17. A communication platform according to claim 16 wherein said private data channel is a virtual private network link (VPN) connected to a network of the subscriber's information system.

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18. A communication platform according to claim 16, wherein said switching unit is capable of redirecting towards the telephone system of a given subscriber incoming calls intended for said subscriber through said communication trunk.

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19. A communication platform according to claim 16, wherein said switching unit is capable of redirecting towards the computer system of a given subscriber incoming calls intended for said subscriber through said private secure data channel.

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20. A communication platform according to claim 16, further comprising:  
 - call handling resources available to each of said intelligent agents,  
 - storage for resource allocation data in association with each intelligent agent, and  
 - control means for allocating call handling resources to a given intelligent agent when handling a telephone call on the basis of said resource allocation data.

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21. A communication platform according to claim 20, wherein said call handling resources comprise voice processing resources.

22. A communication platform according to claim 20, further comprising a billing system in communication with said control means for billing each subscriber according to call handling resource usage.

5 23. A communication platform for providing computer/telephony integration services to remote subscribers, comprising:

- a call switching unit for communicating with an external telephone network or interconnected networks through a communications trunk;
- for each of one or more subscribers, an intelligent agent executed by processing

10 means belonging to the communication platform and connectable to an external subscriber's information system through a virtual private network link (VPN), whereby said intelligent agent can communicate with other components of said subscriber's information system so as to be logically part of said information system, each intelligent agent being capable of controlling calls handled by said switching

15 unit in response to data communication through the Virtual Private Network link.

24. A communication platform for providing computer/telephony integration services to remote subscribers, comprising:

- a call switching unit for communicating with an external telephone network or

20 interconnected networks through a communications trunk;

- for each of one or more subscribers, an intelligent agent executed by processing means belonging to the communication platform and connectable to an external subscriber's information system through a virtual private network link (VPN), whereby said intelligent agent can communicate with other components of said

25 subscriber's information system so as to be logically part of said information system, each intelligent agent being capable of controlling calls handled by said switching unit in response to data communication through the Virtual Private Network link;

- call handling resources available to each of said intelligent agents;
- storage for resource allocation data in association with each intelligent agent, and

30 - control means for allocating call handling resources to a given intelligent agent when handling a telephone call on the basis of said resource allocation data; and

- a billing system in communication with said control means for billing each subscriber according to call handling resource usage.

25. A communication platform for providing computer/telephony integration services to remote subscribers, characterized in that it comprises:

- a hosted call switching unit in communication with an external telephone network or interconnected networks through a communications trunk;
- for each subscriber, a subscriber telephony component executed by processing means belonging to the communication platform and connected to an external subscriber's information system through a permanent private secure data channel, whereby said subscriber telephony component can communicate in a private manner with other information system components of said subscriber so as to be logically part of said information system, each subscriber component being capable of controlling said switching unit according to subscriber data;
- resources available to each subscriber telephony component in association with call processing or routing;
- means for allocating resources to each telephone call handled by a subscriber telephony component in response to data communication with said component through a secure interface.